ABSTRACT

The present invention provides a method for altering a T cell mediated pathology in a patient. This method comprises administering a composition comprising at least one and/or two chimeric proteins. Each chimeric protein comprises at least a portion of either the V_α or V_β region of a TCR from particular T cells from a patient having a T cell mediated pathology, and an immunoglobulin constant region. The genes encoding V_α and/or V_β regions and the genes encoding immunoglobulin constant regions are isolated and inserted into an expression vector. The chimeric proteins are produced by introducing the expression vectors into insect cell lines. The chimeric proteins are purified using antibody affinity columns, and then chemically conjugated to an immunogenic carrier, keyhole-limpet hemocyanin (KLH). Since the conjugates comprises chimeric proteins made specifically from particular T cells from a patient having T cell mediated pathology, when it is administered to such a patient, with or without a cytokine, such as granulocyte-macrophage-CSF, or a chemokine, it can induce immune responses to alter such a T cell mediated pathology.